

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24

Version: 2.0

Page: 1/9

(30551864/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

LIBREL FELO

Recommended use of the chemical and restriction on use

Recommended use*: Chelate

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24
Version: 2.0

Page: 2/9
(30551864/SDS_GEN_US/EN)

Emergency overview

Refer to MSDS Section 7 for Dust Explosion information.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

Seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

dry powder, foam, carbon dioxide, water spray

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24

Version: 2.0

Page: 3/9

(30551864/SDS_GEN_US/EN)

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon oxides, nitrogen oxides

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

Impact Sensitivity:

Method: Explosive properties
Remarks: Substance/product is not impact sensitive at room temperature.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of.
Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Protection against fire and explosion:
Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: none.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure Controls/Personal Protection

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24
Version: 2.0

Page: 4/9
(30551864/SDS_GEN_US/EN)

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	crystalline	
Odour:	odourless	
Colour:	yellow to brown	
pH value:	4.5 - 5.5	(20 g/l)
decomposition point:	> 211 °C	(OECD Guideline 102)
Boiling point:		not applicable
Flash point:		not applicable
Flammability:	not highly flammable	
Lower explosion limit:		not applicable
Upper explosion limit:		not applicable
Autoignition:		not applicable
Vapour pressure:	< 0.000001 hPa	(25 °C)
Density:	1.78 g/cm ³	(20 °C) (OECD Guideline 109)
Relative density:	1.7808	(20 °C) (OECD Guideline 109)
Bulk density:	900 kg/m ³	
Partitioning coefficient n-octanol/water (log Pow):	-8.84	(calculated) The data refers to the undissociated form of the substance.
Self-ignition temperature:		not self-igniting
Viscosity, dynamic:		not applicable
Particle size:		(measured)
% volatiles:		not determined
Solubility in water:	72 g/l	(25 °C)

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24
Version: 2.0

Page: 5/9
(30551864/SDS_GEN_US/EN)

not fire-propagating (Directive 92/69/EEC, A.17)

Dust explosion class:

none (none)

Formation of
flammable gases:

Remarks:

Forms no flammable gases in the
presence of water.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Conditions to avoid

Avoid dust formation. Avoid extreme temperatures.

Incompatible materials

strong oxidizing agents, strong bases, strong acids

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Primary routes of entry

Skin

Inhalation.

Eyes

Ingestion.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Oral

Type of value: LD50

Species: rat (male)

Value: approx. 10,000 mg/kg

Literature data.

Dermal

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 402)

Irritation / corrosion

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24
Version: 2.0

Page: 6/9
(30551864/SDS_GEN_US/EN)

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Eye

Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: No sensitizing effect.

Species: rat
Result: Non-sensitizing.
Method: OECD Guideline 429

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No adverse effects were observed after repeated exposure in animal studies.

Genetic toxicity

Assessment of mutagenicity : Most of the results from the available studies show no evidence of a mutagenic effect. At high concentrations the chelating properties interfere with the essential cation concentrations in the culture medium and within the cells.

Symptoms of Exposure

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) > 100 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
Limit concentration test only (LIMIT test). No mortality was observed. Nominal values (confirmed by concentration control analytics)

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, *Daphnia magna*

Aquatic plants

EC50 (72 h) > 60.6 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)
Inhibition of algal growth is due to the complexing properties of the substance and is not ascribed to an intrinsic toxicity.

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24

Page: 7/9

Version: 2.0

(30551864/SDS_GEN_US/EN)

EC10 (72 h) > 100 mg/l (growth rate), *Desmodesmus subspicatus* (Guideline 92/69/EEC, C.3, static)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Nominal concentration.

Chronic toxicity to fish

No observed effect concentration (35 d) \geq 25.7 mg/l, *Brachydanio rerio* (OECD Guideline 210, Flow through.)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 31 mg/l, *Daphnia magna* (semistatic)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Nominal values (confirmed by concentration control analytics)

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 static

activated sludge of a predominantly domestic sewage/No observed effect concentration (3 h): 640 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria).

Elimination information

0 - 10 % BOD of the ThOD (30 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, domestic sewage)

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulative potential

Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RCRA:

Not a hazardous waste under RCRA (40 CFR 261).

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24
Version: 2.0

Page: 8/9
(30551864/SDS_GEN_US/EN)

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

VOC content:

not determined

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Not hazardous;

CERCLA RQ
10 LBS

CAS Number
143-33-9

Chemical name
Sodium Cyanide

State regulations

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health : 1 Fire: 1 Reactivity: 0 Special: -

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2015/02/24

Safety Data Sheet

LIBREL FELO

Revision date : 2015/02/24

Page: 9/9

Version: 2.0

(30551864/SDS_GEN_US/EN)

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END OF DATA SHEET